

County of Loudoun
Department of Planning
MEMORANDUM

DATE: October 6, 2009

TO: Nicole Steele, Project Manager
Land Use Review

FROM: Pat Giglio, Planner
Community Planning

SUBJECT: SPEX 2009-0011, SPEX 2009-0029 and CMPT 2009-0002
Potomac Radio

EXECUTIVE SUMMARY

The applicant, Potomac Radio, LLC, is requesting two Special Exceptions and a Commission Permit to construct an AM Radio Transmitter on 7.5 acre leased area at the Broad Run Water Reclamation Facility owned by Loudoun Water. The subject property is located in the Ashburn Community of the Suburban Policy Area within an area planned for Keynote Employment uses. Plan policies do not support the location of the proposed communication facility within a Keynote Employment Area. Additionally the applicant is seeking a Special Exception to locate the facility within the Broad Run floodplain, which is not supported by Plan policies. Other outstanding visual impact and environmental issues exist with subject site that require further evaluation. Staff requests additional information to explain how the subject site was selected and/or why an alternative location within a planned industrial and/or employment area with more compatible surrounding land uses was not selected as outlined in the Plan.

BACKGROUND

The applicant, Potomac Radio, LLC, is requesting two Special Exceptions and a Commission Permit to construct an AM Radio Transmitter within a 7.5-acre leased area owned by Loudoun Water at their Broad Run Water Reclamation Facility. The proposed 7.5 acre lease area is located in the northern portion of the property within the floodplain of the Broad Run and is accessed by an existing private gravel road. The proposed facility will consist of three 195' radio lattice towers (self-supporting lattice towers), a buried wire grounding system, transmitter building, dish antennae and back-up generator. The 340-acre subject property is located in the northeast quadrant of the

intersection of Loudoun County Parkway (Route 607) and future Gloucester Parkway and is bordered to the east by the Broad Run.

The property is currently zoned PD-IP (Planned Development – Industrial Park) and governed under the provisions of the 1972 Zoning Ordinance. The proposed “public utility-communication and transmission use” is permitted within the zoning district by Special Exception. A Special Exception is required to locate the use within the floodplain. A Commission Permit is also required for all public facilities to determine if the general location, character, and extent of the use is in substantial accord with the Comprehensive Plan.

A review of County GIS records indicate that several elements of the County’s Green Infrastructure are present on the subject property and within proximity to the lease area, including historic resources, forested areas and significant stream corridor resources associated with the Broad Run. The property is also located with the Ldn 60 1-mile buffer noise contour of the Washington Dulles International Airport.

COMPLIANCE WITH THE COMPREHENSIVE PLAN

The policies of the Revised General Plan, and the Dulles North Area Management Plan (DNAMP) govern the subject site. Being the newer of the two plans, the Revised General Plan supersedes the DNAMP when there is a policy conflict between the two (Revised General Plan, Chapter 1, Relationship to Other County Planning Documents, text). The subject property is located in the Ashburn Community of the Suburban Policy Area in an area planned for Keynote Employment uses (Revised General Plan, Planned Land Use Map, p. 7-23). The property is also located within the Route 28 Tax District.

The Keynote Employment Policies, Energy and Communication Facilities Policies and Environmental Policies of the Revised General Plan where used to evaluate the application. The policies of the Strategic Land Use Plan for Telecommunications Facilities (Telecommunications Plan) where also applied in the evaluation of the application.

ANALYSIS

A. LAND USE

The subject site and proposed AM Radio Transmitter are located in an area planned for Keynote Employment uses (Revised General Plan, Chapter 7, Planned Land Use Map). Keynote Employment Centers are defined as large-scale regional office developments that feature high visual quality and high trip-generating uses, including office parks, research and development parks, corporate headquarters, and similar large scale uses that are generally 40,000 gross square feet or greater (Revised General Plan, Chapter 6, Keynote Employment Centers Policies, Policy 1). The proposed AM Radio Transmitter is not the type of use envisioned in a Keynote Employment Area, though staff notes that existing wastewater treatment facility on the subject site is not a

Keynote Employment use either. However, the four-story wastewater treatment facility has been constructed with materials and architectural features that are in keeping with the Plans vision for Keynote Employment uses. The Plan describes Keynote Employment Centers as areas with high visibility along major corridors, feature large scale buildings accented with heavily landscaped greens and tree-lined boulevards, which are designed to communicate a corporate image and reflect the County's growing prominence as a global crossroads for business (Revised General Plan, Chapter 6, Keynote Employment Centers, text). Keynote employment areas will also have some ancillary retail and employment services to support the predominate office use (Revised General Plan, Chapter 6, Keynote Employment Centers Policies, Policy 1). The proposed AM Radio Transmitter does not support the office uses in the area, unlike other uses, such as a telecommunications facility, which provides cellular and data services that enable daily business activities.

Specific guidance pertaining to the location of "commercial public telecommunication facilities", which are similar in design and appearance to the proposed AM Radio Transmitter, is provided within the policies of the Strategic Land Use Plan for Telecommunications Facilities (Telecommunications Plan). The policies of the Telecommunication Plan state that new monopoles and towers should locate within industrial and employment areas, within overhead transmission right-of-ways and on public sites where they are most compatible with the surrounding land uses (*Telecommunications Plan, Countywide Location Policies, text*). The application does not provide any supporting information as to why the subject site was chosen and/or why an alternative site within a planned industrial and/or employment area with more compatible surrounding land uses was not selected. The proposed construction of the AM Radio Transmitter within a Keynote Employment Area is not compatible with existing and future Keynote Employment use planned for the area. Plan policies do not support the location of the proposed communication facility within a Keynote Employment Area.

Plan policies do not support the location of the proposed communication facility within a Keynote Employment Area. Staff requests additional information to explain how the subject site was selected and/or why an alternative location within a planned industrial and/or employment area with more compatible surrounding land uses was not selected as outlined in the Plan.

Should the applicant consider the subject site further evaluation of the visual and environmental impacts of the proposed use are required. These issues are discussed below.

B. DESIGN AND VISUAL IMPACT

The Telecommunications Plan calls for design standards to mitigate the visual impacts of commercial public telecommunication facilities so as to "blend with the natural and built environment of the surrounding area" (*Telecommunications Plan, Countywide Visual Impacts, Policy 1*). The Plan directs that specific attention be paid to the setting,

color, lighting, topography, materials, and architecture. Antennas and other communication devices should be neutral in color to blend with the background, unless specifically required by the FAA to be painted or lighted otherwise (*Telecommunications Plan, Countywide Visual Impacts, Policy 2*). Accessory structures and equipment buildings should also blend with the surrounding environment through the use of appropriate color, texture of materials, scale, landscaping and visual screening (*Telecommunications Plan, Countywide Visual Impacts, Policy 3*).

The proposed AM Radio Station on the subject site will consist of three (3) 195-foot self-supporting lattice towers with a buried grounding system extending in an overlapping 200 foot radius around each tower. A 20'x25' transmitter building, satellite dishes and auxiliary generator will be located in proximity to the proposed antenna arrays near an existing gravel road that provides access to the site. No information has been provided regarding the coloration or paint scheme of the proposed lattice towers or transmitter building. Staff recommends that the conditions of approval and general plat notes specify the color, texture, and materials of the proposed lattice towers and transmitter building to ensure that the proposed construction blends with the surrounding area. The applicant may wish to consider a paint color or paint scheme for the proposed lattice towers which better blends with the sky to mitigate the visual impact of the proposed structure on the surrounding area.

The application includes drawings and photo-simulations depicting how the three (3) proposed 195' lattice towers will appear from various vantage points surrounding the subject site to illustrate the anticipated visual impact. Based on the submitted photo-simulations and a reconnaissance survey of the area views of the upper portions of the proposed lattice towers above the existing buildings and tree line are anticipated from the north, south and west of the subject site. Views of the proposed lattice towers will be most pronounced from properties to the east where the relatively flat terrain and lack of trees will silhouette the structures on the horizon. It is anticipated that views of the proposed lattice towers from properties to the east along Route 28 will be partially screened by existing forest cover; however future development and the elimination of these forested areas may create new unobstructed sight lines whereby the proposed lattice towers will be visible.

Additionally, it is anticipated that all existing and future multi-story buildings within the vicinity of the subject site (University Center, One Loudoun, Ashby Pond, etc.) will have views of the proposed lattice towers and possibly the ground-mounted facilities depending on their final elevation once constructed. Based on the photo-simulations and a reconnaissance survey of the area, staff anticipates that the proposed lattice towers will be a prominent feature on the landscape and views of the proposed structures will be silhouetted on the horizon from most properties in the vicinity. Staff notes that other tall structures greater than 100' currently exist in the area; which

include the Lerner Building (105'), telecommunication monopoles (185') and high voltage transmission lines comprised of lattice towers and tubular poles (@125'). However, the anticipated visual impact of the three (3) proposed 195' lattice towers on the subject site have the potential of creating a much larger visual impact on the surround area and landscape than the existing individual monopole and tall buildings. Plan policies recommend that the visual impact of commercial public telecommunication facilities be mitigated through appropriate setbacks, screening and design so as to blend with the natural and built environment of the surrounding area (Telecommunication Plan, Countywide Visual Impacts, Policy 1).

Staff notes that the three (3) 195-foot lattice towers proposed on the subject site have the potential of creating a significant visual impact on the surrounding properties and landscape. Staff requests additional information to explain how the subject site was selected and/or why an alternative site on another property with more extensive vegetation to screen the proposed communication facility was not selected in order to mitigate the visual impact on the surrounding area.

Staff recommends that the applicant consider alternative designs and/or color schemes to better camouflage and minimize the potential visual impact of the proposed communication facility on the surrounding area.

D. SAFETY AND HEALTH

Plan policies state "an applicant or its successors shall remove all unused structures and facilities from a commercial public telecommunications site, including lattice towers and monopoles, within 90 days of cessation of commercial public telecommunications use or the expiration of the lease, whichever occurs first, and the site should be restored as closely as possible to its original condition" (*Telecommunications Plan, Safety and Health Policies, Policy 2*).

Staff recommends that a condition of approval be included to require removal of the facility following cessation of use.

E. EXISTING CONDITIONS

The Green Infrastructure is a collection of natural, cultural, heritage, environmental, protected, passive and active resources that will be integrated in a related system. It includes stream corridors, vegetative landscapes, wildlife and endangered species habitats, and heritage resources (*Revised General Plan, Chapter 5, Green Infrastructure Policies, Policy 1*). Development should take place around these elements, incorporating them into the design of the site. Such an approach places a priority on preserving both sensitive environmental and man-made features.

Elements of the Countywide Green Infrastructure can be found on the subject site, including stream corridor resources, forest cover, plant and wildlife habitat and historic resources. Detailed Plan guidance on the treatment of individual Green Infrastructure elements is outlined in the following sections.

1. Stream Corridor Resources

The subject property is located within the Broad Run watershed and contains significant stream corridor resources associated with the Broad Run. The stream corridor elements on the subject property consist of major floodplain, minor floodplain, and riparian forest.

The Broad Run, adjoining floodplains, and adjacent steep slopes (slopes 25% or greater) within 50 feet of streams and floodplains, extending no farther than 100 feet beyond the originating stream or floodplain; along with the 50-foot management buffer surrounding the adjacent steep slopes, as called for in the Revised General Plan together constitute the river and stream corridor resource (Revised General Plan, Chapter 5, River and Stream Corridor Resources Policies, Policy 2). The Plan's intent for the 50-foot management buffer is to serve as protection for the river and stream corridor elements from upland disturbances and adjacent development (Revised General Plan, Chapter 5, River and Stream Corridor Resources Policies, Policy 4). The Plan permits a limited number of uses in the stream corridor, including passive and active recreation, road crossings, utility corridors, pervious paths and trails, and agricultural activities (Revised General Plan, Chapter 5, River and Stream Corridor Resources Policies, Policy 18). While the subject property is administered under the 1972 Zoning Ordinance and the proposed communication facility in the floodplain is permitted by approval of Special Exceptions within the PD-IP zoning district, the policies of the Revised General Plan do not support the construction of the proposed facility within the floodplain.

The Plan does not support the construction of structures such as the proposed communication facility within the floodplain or the 50-foot management buffer of Broad Run. Staff recommends that the applicant consider alternative locations outside the floodplain and 50-foot management buffer in order to protect the stream corridor resources on the property.

2. Forests, Trees, and Vegetation

The Plan supports the conservation of forest resources and natural vegetation during the site development process for the various economic and environmental benefits that they provide (Revised General Plan, Chapter 5, Forest, Tree and Vegetation Policy 1). The County's forests and trees improve air and water quality, offer important habitat for birds, small mammals and other wildlife. Riparian forests along streams and rivers provide the greatest single protection of water quality by filtering pollutants from stormwater runoff, decreasing soil erosion and maintaining physical, chemical and biological condition to the stream environment (Revised General Plan, Chapter 5, Forest, Tree and Vegetation Policy, text). The construction of the proposed communication facility will require the removal of a portion of an existing forested area within the floodplain of Broad Run. The policies of the Revised General Plan do not

support the construction of the proposed communication facility within the floodplain and supports the preservation of riparian forests for their environmental benefits.

The policies of the Revised General Plan do not support the construction of proposed communication facility within the river and stream corridor resource and supports the preservation of the forested areas located in the floodplain for their environmental benefits. Staff recommends that the applicant consider alternative locations outside the river and stream corridor resource which avoids impacts to existing forested areas.



View South of proposed 7.5 acre lease area from access road. Portion of forested area in background to be removed for proposed communication facility.

3. Plant and Wildlife Habitats

The Plan states that “the County will use the Virginia Department of Conservation and Recreation, Division of Natural Heritage’s Biological and Conservation Data system to identify Loudoun County’s natural heritage resources. These resources include rare, threatened and endangered plant and animal species; exemplary natural communities, habitats, and ecosystems; and other natural features of the County. The County will apply this information in the evaluation of development proposals. For those development applications that have a likely presence of one or more natural heritage resources, the County will require the applicant to conduct a species assessment and develop a plan for impact avoidance in cases where the presence of the species is

identified" (*Revised General Plan, Chapter 5, Plant and Wildlife Habitats Policies, Policy 8*).

The applicant has included an Environmental Assessment Report and Addendum prepared by blueskies environmental associates, inc. which determined there were no endangered or threatened species, rare plant species, or rare plant communities on the subject site. However, staff notes that during the processing of another legislative application (Kincora, ZMAP 2008-0021) a Heron Rookery was identified approximately 700 feet northeast of the subject site. It has been determined by state and federal agencies that communication towers and antennas may pose a hazard to birds in flight and may pose a threat to nesting birds attracted to them. Staff recommends that further evaluation of the potential impacts of the proposed construction of a communication facility on birds and the existing Heron Rookery within the vicinity of the subject site be provided. Consultation and review by the Virginia Department of Conservation and Recreation (DCR), Virginia Department of Game and Inland Fisheries (VDGIF) and the United States Department of Interior, Fish and Wildlife Service are recommended.

Staff cannot support the proposed location while there is a potential impact on birds and the Heron Rookery. Staff recommends that the applicant consult with the appropriate state and federal agencies to identify mitigation options.

4. Historic Resources

The Revised General Plan states the County will require an archaeological and historic resources survey as part of all development applications (*Revised General Plan, Chapter 5, Historic and Archaeological Resources Policies, Policy 11*). A series of Phase 1 and Phase 2 archaeological surveys were conducted on the subject property which identified several important historic and prehistoric archaeological sites. A prehistoric archaeological site (44LD0210) was identified on the subject site, which may be impacted by the proposed buried wire grounding system associated with the 195' lattice towers.

Should the proposed communication facility be located on the subject site or relocated elsewhere, staff recommends avoidance of archaeological sites.

RECOMMENDATIONS

Plan policies do not support the location of the proposed AM Radio Transmitter within a Keynote Employment Area. The proposed communication facility does not appear to service the surrounding office and employment uses; and thus far no compelling information has been provided to indicate why they must locate on the subject site. Staff requests additional information to explain how the subject site was selected and/or why an alternative location within a planned industrial and/or employment area with more compatible surrounding land uses was not selected as outlined in the Plan. The applicant is also seeking a Special Exception to locate the facility within the Broad Run floodplain on the subject site, which is not supported by Plan policies. Should the applicant consider locating on the subject site staff recommends that the application

consider alternative locations outside the river and stream corridor resource which avoids impacts to existing forested areas, wildlife habitat and historic resources. Additionally staff recommends that the applicant consider alternative designs and/or color schemes to better camouflage and minimize the potential visual impact of the proposed communication facility on the surrounding area. Staff cannot recommend approval of the Special Exceptions and Commission Permit request at this time.

As always, staff would be happy to meet with the applicant to discuss these issues.

cc: Julie Pastor, AICP, Planning Director
Cindy Keegan, AICP, Division Manager, Community Planning-via email